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Therapeutic activity of flavanones against acrylamide-induced hepatotoxicity

Arti Rathour, Sadhana Shrivastava and Sangeeta Shukla

Reproductive Biology and Toxicology Laboratory, UNESCO Satellite Centre for Trace Element Research, School of Studies in Zoology, Jiwaji University

Gwalior, Madhya Pradesh,

Email:artirathore0207@gmail.com

The recent finding that acrylamide (AA), a probable human carcinogen, is formed in foods during cooking raises human health concerns. The relevance of dietary exposure for humans is still under debate. The purpose of the study was to evaluate the possible therapeutic activity of flavanones against acrylamide-induced hepatotoxicity. Cytotoxicity assay **,**Sulphorhodamine Blue (SRB) Assay **.** This study provided evidence showing that active principles flavanones possessed effectiveness against acrylamide induced cytotoxicity on H*epG2 cell lines,* while caffeic acid showed greater efficacy on HepG2 cell lines. This study suggested that caffeic acid and hesperetin may be used as inexpensive and easily accessible sources of potential natural therapeutic agents. Further investigations on a larger number of cancer cell lines and *in vivo* studies should be conducted to investigate the possibility of developing the caffeic acid as promising therapeutic drugs.

Keywords: Acrylamide;Cytotoxicity assay;Sulphorhodamine Blue (SRB) Assay;HepG2 cells